

MULTIMEDIA



UNIVERSITY

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# MULTIMEDIA UNIVERSITY

## FINAL EXAMINATION

TRIMESTER 3, 2015/2016

**PAT0075 – COST AND MANAGEMENT ACCOUNTING**  
(Foundation in Management)

1 JUNE 2016  
2.30 p.m. – 4.30 p.m.  
(2 Hours)

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### INSTRUCTIONS TO STUDENT

1. This question paper consists of **SIX** pages with **FIVE** questions only.
2. Answer **ALL** questions.
3. Write your answers in the Answer Booklet.

## STRUCTURED QUESTIONS [100 MARKS]

**Instructions:** Answer ALL questions. Write your answers in the Answer Booklet.

### QUESTION 1

Tasio Company produces two types of financial calculator, ABX01 and ABX02. The traditional costing system allocates manufacturing overheads on the basis of machine hours for both products. Data related to the two products are presented below:

	ABX01	ABX02
Annual production in units	10,000	15,000
Direct material costs	RM120,000	RM240,000
Direct manufacturing labor costs	RM50,000	RM80,000
Direct manufacturing labor hours	10,000 hours	11,000 hours
Machine hours	25,000 hours	50,000 hours
Number of production runs	25 runs	25 runs
Inspection hours	500 hours	250 hours

Total manufacturing overhead costs are given as follows:

Activity	Cost driver	Activity cost (RM)
Machining	Machine hours	275,000
Set-up	Number of production runs	110,000
Inspection	Inspection hours	100,000
Assembly	Direct manufacturing labor hours	100,000

Recently, the owners of Tasio Company have heard about other companies in the industry that are now using an activity-based costing system.

### REQUIRED

- Calculate the cost driver rate for each product using activity-based costing system. (4 marks)
- Calculate the total manufacturing overhead cost for each product using activity based costing system. (6 marks)
- Compute the manufacturing cost per unit for each product. (7 marks)
- Briefly explain ONE(1) of the comparisons between traditional and activity-based costing system. (3 marks)

(TOTAL 20 MARKS)

Continued...

**QUESTION 2****Part A**

The following information is provided by Yufuin Corporation:

Work in progress Inventory units, 1 January	0
Units started	14,000
Units completed and transferred out	9,000
WIP inventory units, 31 December	5,000
Direct materials	RM25,500
Direct labour	RM28,000
Manufacturing overhead	RM6,500

The units in ending work in progress inventory were 75% complete for direct materials and 50% complete for conversion costs.

**REQUIRED**

- Calculate the equivalent units of closing work in progress inventory for direct materials and conversion costs. (2 marks)
- Calculate the total equivalent units for direct materials and conversion costs. (2 marks)
- Calculate the cost per equivalent unit for direct materials, conversion costs, and total cost per equivalent unit. (2.5 marks)
- Calculate the cost of closing work in progress inventory. (2.5 marks)
- Calculate the cost of completed units. (1 mark)

**Part B**

Toyama Company produces jump ropes. Toyama Company has the following sales projections for the upcoming year 2017:

First quarter budgeted jump rope sales in units	21,000
Second quarter budgeted jump rope sales in units	35,000
Third quarter budgeted jump rope sales in units	22,000
Fourth quarter budgeted jump rope sales in units	30,000

Toyama Company wants to have 20% of the next quarter's sales in units on hand at the end of each quarter. Inventory at the end of 2017 is estimated to be 4,200 jump ropes.

**REQUIRED**

Prepare the production budget for the upcoming year 2017. (10 marks)

**(TOTAL 20 MARKS)**

Continued...

### QUESTION 3

Treasured Vase Sdn Bhd produces and sells decorated vase. In 2015, the company had produced and sold 6000 units. The following is the information about the company's operation for the year 2015.

	Total (RM)
Sales	360,000
Variable Costs	270,000
Contribution Margin	90,000
Fixed Costs	48,000
Net income	42,000

#### REQUIRED

- a) Based on the information provided, compute the:
  - i. per unit figures of each item listed above. (7 marks)
  - ii. breakeven point units for 2015. (3 marks)
  - iii. margin of safety units for 2015. (3 marks)
  - iv. compute the contribution margin ratio for 2015. (2 marks)
- b) Compute the sales units required to achieve the net income of RM49,500. (2 marks)
- c) Determine the sales unit required to achieve the net income of RM60,000 if the fixed cost is increased by 25%. (3 marks)

(TOTAL 20 MARKS)

Continued...

## QUESTION 4

Bentara Sdn. Bhd. manufactures a small component that is widely used in various electronic products. Below are the operating results for the first quarter of Bentara Sdn. Bhd.

**Statement of Profit and Loss and Other Comprehensive Income  
For the first Quarter Ended 31 March 2016**

	RM	RM
Sales (42,000 units)		2,520,000
Less Variable costs:		
Variable manufacturing cost	1,039,500	
Variable selling and administrative	<u>378,000</u>	<u>(1,417,500)</u>
Contribution margin		1,102,500
Less Fixed costs:		
Fixed manufacturing overhead	450,000	
Fixed selling and administrative	<u>300,000</u>	<u>(750,000)</u>
Net income		<u>352,500</u>

Production and cost data relating to the electronic products for the first quarter are as follows:

Units produced	45,000
Units sold	42,000
Variable costs per unit:	RM
Direct materials	5.25
Direct labour	18.00
Variable manufacturing overhead	1.50
Variable selling and administrative	9.00

### REQUIRED

- Calculate the unit product cost under absorption costing. (5 marks)
- Prepare Statement of Profit or Loss and Other Comprehensive Income for the **first quarter of 2016** using absorption costing. (7 marks)
- During the second quarter of operations, the company produced 45,000 units and sold 48,000 units. Assuming that there is no change in total fixed costs, prepare the Statement of Profit or Loss and Other Comprehensive Income for the **second quarter of 2016** using marginal costing. (8 marks)

**(TOTAL 20 MARKS)**

Continued...

**QUESTION 5****Part A**

Forby Paint Production Company needs 2,000 units of paint containers for its production process. Forby can buy these containers from one of the market leading company Supermatel Incorporation for RM1,000 each. Forby can produce the containers internally based on the following cost per unit:

	RM
Direct material	620
Direct labour	220
Variable manufacturing overhead	200
Fixed manufacturing overhead	300
Supervisor salary	30

If Forby buys the containers from Supermatel company, 70% of the fixed manufacturing overhead cost is unavoidable and 100% of the supervisor's salary is avoidable.

**REQUIRED**

Using relevant cost approach, should Forby Paint make or buy the containers?

(10 marks)

**Part B**

Renoti Restaurant is planning to have two different branches. Below is the market analysis for both projects:

	Branch 1	Branch 2
Initial investment	RM200,000	RM200,000
Expected annual cash flows	RM100,000	RM90,000
Estimated life	8 Years	8 years
Estimated residual value	RM40,000	0

Straight line depreciation method is used and minimum required rate of return is 8%. The discount factor and discount factor annuity at 8% are as follows:

Period	Present value of RM1 at 8%	Present value of ordinary annuity of RM1 at 8%
1	0.926	0.926
2	0.857	1.783
3	0.794	2.577
4	0.735	3.312
5	0.681	3.993
6	0.630	4.623
7	0.583	5.206
8	0.540	5.747

**Continued...**

**REQUIRED**

- a) Compute net present value (NPV) and accounting rate of return (ARR) for each project. (9 marks)
- b) Which project will Renoti Restaurant choose? Why? (1 mark)

**(TOTAL 20 MARKS)**

**End of Paper**